

Nederlands Meetinstituut

# Test certificate

Number **TC6138** revision 1  
Project number 210721  
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Issued by NMI Certin B.V.  
Hugo de Grootplein 1  
3314 EG Dordrecht  
The Netherlands

Notified Body Number 0122

In accordance with Paragraph 8.1 of the European Standard on Metrological aspects of non-automatic weighing instruments EN 45501:1992/AC:1993 and by application of the OIML International Recommendation R 60 (Edition 2000). The applied error fraction  $p_i$ , meant in the paragraph 3.5.4. of the standard is 0.7.

Applicant Revere Transducers Europe B.V.  
Ramshoorn 7  
4824 AG Breda  
The Netherlands

In respect of The model of a **shear beam load cell**, with strain gauges, tested as a part of a weighing instrument.  
Manufacturer : Revere Transducers  
Type : 9123

## Characteristics

Maximum capacity ( $E_{max}$ )	500 kg up to and including 2000 kg 1 klbs up to and including 5 klbs			
Accuracy Class	C			
Maximum number of load cell intervals (n)	3000	4000	3000 (MR)	4000 (MR)
Ratio of minimum LC Verification interval $Y = E_{max} / V_{min}$	6000	8000	10000	18000
Ratio of minimum dead load output return $Z = E_{max} / (2 * DR)$	--	--	3000	4000

In the description TC6138 revision 1 further characteristics are described.

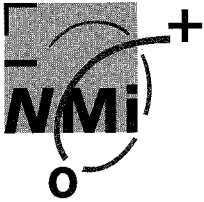
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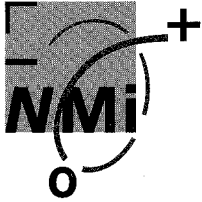
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Description and documentation The load cell is described in the description number TC6138 revision 1 and documented in the documentation folder TC6138-1, appertaining to this test certificate.

Remarks Summary of the test involved: see Appendix number TC6138 revision 1  
This revision test certificate replaces the earlier version, except for its documentation folder.

Delft, 13 January 2003  
NMI Certin B.V.

P.P.M. van Enkevort  
Manager Certification Delft



## 1 General information about the load cell

All properties of the load cell, whether mentioned or not, may not be in conflict with the standard mentioned in the test certificate.

### 1.1 Essential parts

Description	Drawing number	Rev.	Remarks
Dimensional outline drawing Model 9123 metric capacities 0.5 t – 5 t	92487	B	Mechanical
Dimensional outline drawing Model 9123 capacities 250 – 20 K lbs	92430	F	Mechanical
Wiring diagram Model 9123 Capacities 2.5 K – 20 K lb	29176	C	Electrical

#### Cable:

- The load cell is provided with a 4 wire or 6-wire system.
- If no "remote-sensing" (4-wire) is used the cable length may not be changed, the cable length has to be approximately 6 meters or has to correspond with the option code see below.

9123-yyy-Cz-option-option

9123 type designation  
 yyy Standard Capacity (t)  
 z maximum number of load cell intervals

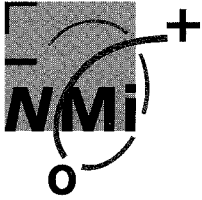
option:

6w 6-wire cable, 4-wire cable is standard  
 ..m or ..ft cable length, other then being standard

- The cable should be a shielded cable.

### 1.2 Essential characteristics

Minimum dead load : 0 kg  
 Safe overload : 150 % of  $E_{max}$   
 Rated Output : 3 mV/V  
 Input impedance :  $350 \Omega \pm 3.5 \Omega$   
 Output impedance :  $350 \Omega \pm 3.5 \Omega$   
 Recommended excitation : 5 ... 12 V DC/AC  
 Excitation maximum : 15 V DC/AC  
 Transducer material : Stainless Steel 1.4542  
 Atmospheric protection : Transeal potting compound



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# Description

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## 1.3 Essential shapes

The load cell is built according to drawing:

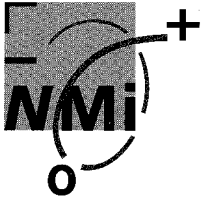
Dimensional outline drawing Model 9123 metric capacities 0.5 t – 5 t, drawing number 92487 rev. B

Dimensional outline drawing Model 9123 capacities 250 – 20 K lbs, drawing number 92430 rev. F

The data plate is sealed against removal or will be destroyed when removed. The data plate mentions at least the information and markings as described in the OIML R60 document. In the countries where it is mandatory the load cell should bear this test certificate number: TC6138.

Securing:

The connecting cable of the load cell or the junction box is provided with possibility to seal.



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# Appendix

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Tests carried out for this test certificate:

Test	Institute	type, version, remarks
Temperature test and repeatability (20, 40, -10 and 20 °C)	NMi Certin B.V.	9123 1 klbs C4 MR
Temperature effect on minimum dead load output (20, 40, -10 and 20 °C)	NMi Certin B.V.	9123 1 klbs C4 MR
Creep test (20, 40 and -10 °C)	NMi Certin B.V.	9123 1 klbs C4 MR
Minimum load output return (20, 40 and -10 °C)	NMi Certin B.V.	9123 1 klbs C4 MR
Barometric pressure test at room temperature	NMi Certin B.V.	9123 1 klbs C4 MR
Humidity test	NMi Certin B.V.	9123 1 klbs C4 MR